



Utah's Efforts to Stop Invasive Mussels

Status report for 2010

During the 2008 legislative session, Utah lawmakers learned about a significant threat to the state's water supplies, irrigation systems, hydroelectric plants, recreation areas and aquatic wildlife. The Legislature took swift action to protect these critical resources from invasive quagga and zebra mussels. Lawmakers passed the Aquatic Invasive Species Interdiction Act and funded a multipronged education, detection and prevention effort.



It took only three months for mussels to completely cover and block this once-clean pipe. One breeding pair of invasive mussels produces more than a million offspring each season.



Mussels will attach to surfaces in a contaminated water. They travel from one water to another on boats and other equipment. To remove them, boaters must use the Clean, Drain & Dry self-decontamination method or have their boats professionally cleaned with 140° F water.

Funding, partnerships and progress in 2010

To continue fighting the invasive mussel threat, the 2010 Legislature approved \$1,350,000 in General Funds for FY 2011. Federal, corporate and water conservancy district partners also supported this effort and provided more than \$366,000 in additional funding. Using those funds, the Utah Division of Wildlife Resources (DWR) and its partners focused on inspection, education, decontamination and enforcement during the 2010 boating season. Working together, they:

- Inspected 408,683 boats—and educated their owners—before they entered Utah lakes and reservoirs.
- Decontaminated 11,116 boats that had recently boated in infested waters outside Utah. Eighteen of those boats were encrusted with mussels, many of which were alive.
- Issued 6,036 informal notices of violation, 1,581 written warnings and 341 formal citations. Law-enforcement personnel had more than 14,100 contacts with boaters on this issue.
- Continued a coordinated, aggressive outreach and education effort, involving news media, Web content, brochures, boat-ramp signs and recreation area posters.

- Used outreach efforts to obtain free, widespread media coverage. There were 28 television programs or news stories (a value of \$58,248), 30 radio programs and 45 newspaper articles.
- Directed the public to the DWR's website, where the invasive mussel pages had more than 36,000 views.
- Assigned and equipped a mix of seasonal and full-time personnel (primarily biologists, inspection technicians and conservation officers) to educate boaters and to inspect watercraft.
- Coordinated hundreds of volunteers, who donated nearly 7,000 hours toward education and prevention efforts.
- Provided an online Mussel-Aware Boater course that more than 3,600 boaters completed. They received a certificate that streamlined the launch process throughout the 2010 season.
- Sampled 59 waterbodies for the presence of quagga and zebra mussels

Early detection of mussels

In late May 2010, a diver found an adult quagga mussel attached to the underside of a dock in Utah's Sand Hollow Reservoir. The DWR implemented a rapid-response strategy and containment order that mandated decontamination before boats could leave the reservoir. In addition, personnel at all other Utah waters asked pre-launch boaters if they had been to Sand Hollow recently. If the boaters had visited Sand Hollow within the past 30 days, they were also required to decontaminate.

No additional mussels or their microscopic young (called veligers) have been found at Sand Hollow Reservoir since the initial finding in May. In 2010, no veligers or adults were found at Electric Lake and Red Fleet Reservoir, where veligers were detected two years ago.

Boater compliance and future efforts

In 2010, two online surveys revealed that the DWR's outreach and education work has been effective. Between 96 and 100 percent of boaters were aware of the mussel threat. The survey also revealed the following:

- Most boaters (85–100 percent) report that they completed and displayed their Decontamination Certification forms.
- Approximately 84–87 percent of boaters report that they decontaminated their boats.

The DWR wants to improve boaters' compliance, possibly through targeted law-enforcement efforts and additional media outreach. To fund this work—and to continue protecting Utah's waters, diversion structures and aquatic wildlife—the DWR hopes to maintain program funding in FY 2012.

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